

WHAT IS CLAIMED IS:

1. A data transmitting/receiving device, comprising:

5 a serial-parallel conversion circuit for converting received first serial data to first parallel data;

a data selection circuit for selecting any one of the first parallel data and externally-supplied second parallel data and outputting the selected data; and

a parallel-serial conversion circuit for converting the first or second parallel data output from the data selection circuit to second serial data which is to be transmitted.

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2. The data transmitting/receiving device of claim 1, wherein the parallel-serial conversion circuit operates in synchronization with the serial-parallel circuit when the data selection circuit selects the first parallel data.

15 3. The data transmitting/receiving device of claim 1, further comprising a clock adjustment circuit for receiving a first clock signal and the first serial data and adjusting the first clock signal to output a second clock signal which is in synchronization with the first serial data,

20 wherein the serial-parallel conversion circuit operates in synchronization with the second clock signal.

4. The data transmitting/receiving device of claim 2, further comprising a clock selection circuit for selecting any one of the first clock signal and the second clock signal and inputting the selected clock signal to the parallel-serial conversion circuit, wherein:

25 when the data selection circuit selects the first parallel data, the clock

selection circuit selects the second clock signal; and

when the data selection circuit selects the second parallel data, the clock selection circuit selects the first clock signal.

5 5. A data transmitting/receiving device, comprising:

a serial-parallel conversion circuit for converting received first serial data to first parallel data;

a data processing circuit for outputting second parallel data;

a control circuit for stopping the operation of the data processing circuit;

10 a data selection circuit for selecting any one of the first parallel data and the second parallel data and outputting the selected data; and

a parallel-serial conversion circuit for converting the first or second parallel data output from the data selection circuit to serial data which is to be transmitted.

15 6. The data transmitting/receiving device of claim 5, wherein the parallel-serial conversion circuit operates in synchronization with the serial-parallel circuit when the data selection circuit selects the first parallel data.

7. The data transmitting/receiving device of claim 6, further comprising a clock
20 adjustment circuit for receiving a first clock signal and the first serial data and adjusting the first clock signal to output a second clock signal which is in synchronization with the first serial data,

wherein the serial-parallel conversion circuit operates in synchronization with the second clock signal.

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8. The data transmitting/receiving device of claim 7, further comprising a clock selection circuit for selecting any one of the first clock signal and the second clock signal and inputting the selected clock signal to the parallel-serial conversion circuit, wherein:

when the data selection circuit selects the first parallel data, the clock
5 selection circuit selects the second clock signal; and

when the data selection circuit selects the second parallel data, the clock
selection circuit selects the first clock signal.

9. The data transmitting/receiving device of claim 7, wherein:

10 the data processing circuit is divided into a plurality of units, the distances
of the plurality of units from the clock adjustment circuit being different from each other;
and

the control circuit stops the operation of the data processing circuit
independently for each of the units.

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10. The data transmitting/receiving device of claim 8, wherein:

the data processing circuit is divided into a plurality of units, the distances
of the plurality of units from the clock adjustment circuit being different from each other;
and

20 the control circuit stops the operation of the data processing circuit
independently for each of the units.

11. A data transmitting/receiving device, comprising:

a latch circuit for storing received first serial data;

25 a serial-parallel conversion circuit for converting the first serial data to first

parallel data;

a parallel-serial conversion circuit for converting externally-supplied second parallel data to second serial data; and

a data selection circuit for selecting any one of the first serial data and the second serial data and outputting the selected data as transmission data.

12. The data transmitting/receiving device of claim 11, further comprising a clock adjustment circuit for receiving a first clock signal and the first serial data and adjusting the first clock signal to output a second clock signal which is in synchronization with the first serial data,

wherein the latch circuit and the serial-parallel conversion circuit operate in synchronization with the second clock signal.

13. A data transmitting/receiving device, comprising:

a latch circuit for storing received first serial data;

a serial-parallel conversion circuit for converting the first serial data to first parallel data;

a data processing circuit for outputting second parallel data;

a control circuit for stopping the operation of the data processing circuit;

a parallel-serial conversion circuit for converting the second parallel data to second serial data; and

a data selection circuit for selecting any one of the first serial data and the second serial data and outputting the selected data as transmission data.

14. The data transmitting/receiving device of claim 13, further comprising a clock adjustment circuit for receiving a first clock signal and the first serial data and adjusting the first clock signal to output a second clock signal which is in synchronization with the first serial data,

5 wherein the latch circuit and the serial-parallel conversion circuit operate in synchronization with the second clock signal.

15. The data transmitting/receiving device of claim 13, wherein when the control circuit stops the data processing circuit, the parallel-serial conversion circuit and the serial-parallel
10 conversion circuit stop their operation.

16. The data transmitting/receiving device of claim 14, wherein when the control circuit stops the data processing circuit, the parallel-serial conversion circuit and the serial-parallel conversion circuit stop their operation.

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17. The data transmitting/receiving device of claim 14, wherein:

 the data processing circuit is divided into a plurality of units, the distances of the plurality of units from the clock adjustment circuit being different from each other; and

20 the control circuit stops the operation of the data processing circuit independently for each of the units.

18. The data transmitting/receiving device of claim 17, wherein when the control circuit stops at least one of the plurality of units, the parallel-serial conversion circuit and the
25 serial-parallel conversion circuit stop their operation.